

ABSTRACT

A communication method for a noncontact RF ID system that uses a first waveform, a second waveform, and a third waveform, wherein the first waveform and the second waveform are formed by a basic waveform having one of a rising or falling state transition at the approximate center of the waveform, the third waveform is formed by a plurality of basic waveforms that have one state transition at the approximate center part of the waveform, and the third waveform generates one state transition only at the approximate center of the plurality of basic waveforms. In addition, communication is carried out by using the third waveform in place of the first waveform and the second waveform in the case in which communication is carried out using a first waveform and a second waveform and one state transition is generated outside the approximate center part of the basic waveform.